

Antibiotic Resistance & Patient Safety Portal

Hospital Antibiotic Stewardship Data

2020

Data Methodology

The Hospital Antibiotic Stewardship section of the Antibiotic Resistance & Patient Safety Portal includes data on antibiotic stewardship practices as reported by U.S. acute care hospitals to CDC's National Healthcare Safety Network (NHSN). For more information about NHSN, including details on surveillance methodology, see <http://www.cdc.gov/nhsn/about-nhsn/index.html>.

Data Represented

Healthcare facilities participating in NHSN complete an annual online survey, which includes questions on facility demographics, laboratory practices, infection control practices, and as of 2014, questions specific to antibiotic stewardship program (ASP) organizational structure, support, and activities. The survey is typically completed by a hospital's infection preventionist, however, hospital staff who complete ASP questions are encouraged by CDC to request assistance from "pharmacists and/or physicians who focus on Antibiotic Stewardship or Infectious Diseases, where available, and/or members of the Pharmacy and Therapeutics Committee."

CDC Core Elements of Hospital ASPs

1. Leadership Commitment
2. Accountability
3. Pharmacy Expertise
4. Action
5. Tracking
6. Reporting
7. Education

The ASP portion of the **2020** NHSN annual hospital survey is composed of ten required questions (#31-40) and nine optional questions (#41-49). CDC uses responses to required questions to assess whether facilities meet criteria for each of the seven Core Elements of Hospital Antibiotic Stewardship Programs. Data displayed in the Hospital Antibiotic Stewardship section of the Antibiotic Resistance & Patient Safety Portal are aggregated at the state and national level.

Mapping of Survey Questions to Core Elements

Survey question numbers below correspond to the **2020** NHSN Patient Safety Component Annual Hospital Survey. A hospital must meet at least one criterion listed under each core element for that core element to be considered met.

1. Leadership Commitment: Dedicating necessary human, financial, and information technology resources.

- #31** Formal statement of support for antibiotic stewardship
- #32** Facility leadership demonstrates commitment to ASP efforts by communicating to staff about stewardship activities, providing staff with opportunities for ASP training, or allocating information technology resources
- #33** Facility has a committee responsible for antibiotic stewardship
- #34** Physician or pharmacist (co)leader has antibiotic stewardship responsibilities in their contract or job description



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Zoonotic Infectious Diseases

2. Accountability: Leader responsible for antibiotic stewardship program outcomes.

#34 *Facility has a leader or co-leader responsible for antibiotic stewardship outcomes*

3. Pharmacy Expertise: Pharmacist leader responsible for working to improve antibiotic use.

#34 *Facility has pharmacist (co)leader responsible for antibiotic stewardship outcomes*

#34 *Facility is not co(led) by a pharmacist, but has least one pharmacist responsible for improving antibiotic use*

4. Action: Performance of at least one prescribing improvement action.

#35 *Required documentation of indication for antibiotic orders*

#35 *Required documentation of duration for antibiotic orders*

#35 *Antibiotic time out*

#35 *Prospective audit with feedback*

#35 *Prior authorization*

#36 *Providers have access to facility- or region-specific treatment guidelines or recommendations for commonly encountered infections*

#37 *Facility targets select diagnoses for active interventions to optimize antibiotic use*

5. Tracking: Monitor prescribing and antibiotic resistance patterns.

#35 *ASP team audits antibiotic orders to review appropriateness indications*

#36 *ASP team monitors adherence to facility- or region-specific treatment guidelines or recommendations*

#38 *ASP team monitors antibiotic resistance patterns*

#38 *ASP team monitors antibiotic use (consumption) in DOT, DDD, or expenditures*

6. Reporting: Regularly report to staff prescribing and resistance patterns.

#35 *Prospective audit with feedback*

#38 *ASP team provides individual-, unit-, or service-specific reports on antibiotic use to prescribers*

#39 *ASP team provides facility leadership with updates on antibiotic use and stewardship efforts or provides staff with updates on outcomes for antibiotic stewardship interventions*

7. Education: Clinicians educated on antibiotic resistance and improving prescribing practices.

#40 *Education on appropriate antibiotic use provided at least annually to prescribers, nursing staff, or pharmacists*

